REMARKS

The present Response is submitted in response to the Office Action of June 17, 2008.

Claims 1 - 57 are presently pending in the Application and claims 24 - 34 and 44 - 52 have been withdrawn from consideration while claims 1 - 23, 35 - 43 and 53 - 57 are presently rejected.

The Examiner has objected to claims 3, 4 and 8 for informalities therein, specifically that claims 3, 4 and 8 specify an addition step f) to the method steps recited in claim 1.

In response, the Applicant has amended claims 3, 4 and 8 by canceling claims 4 and 8 and amending claim 3 to recite a single step f) comprised of one or more of the process steps originally recited in claims 3, 4 and 8. It will be noted that the Applicant has also reviewed the claims for informalities therein and has amended certain other minor informalities in the claims, as may be seen from the claims as presented herein above.

It will be noted that these amendments are fully supported by the Application as originally filed, are not submitted to and do not operate to overcome the cited prior art, and do not add any new matter to or alter the subject matter or scope of the invention, the disclosure or the claims.

It is the Applicant's belief that these amendments to claims 3, 4 and 8 have addressed and overcome the informality cited by the Examiner in the objection to claims 3, 4 and 8 and the Applicant accordingly respectfully requests that the Examiner reconsider and withdraw the objections to claims 3, 4 and 8.

The Examiner has also rejected the claims over cited prior art, including:

(a) claims 35 - 40 and 54 - 57 under 35 U.S.C. 102 over Zhang '779,

(b) claims 1 - 6, 9 - 11, 14, 16 - 20, 41 and 53 under 35 U.S.C. 103 over Zhang '779 in view of Dhond et al. and further in view of Nefian et al. '018,

(c) claims 7, 8, 12, 13, 15, 21 - 23 and 42 under 35 U.S.C. 103 over Zhang '779 in view of Dhond et al. and further in view of Nefian et al. '018 and further in view of Woods et al., and

(d) claim 43 under 35 U.S.C. 103 over Zhang '779 in view of Woods et al.

It will be noted for purposes of the following discussions that claims 1, 35, 43, 53 and 54 are independent claims and that claims 2 - 23 are directly or indirectly dependent from claim 1 and thus incorporate all limitations of claim 1, that claims 36 - 41 are dependent from claim 35 and thus incorporate all limitations of claim 35, and that claims 55 - 57 are directly or indirectly dependent from claim 54 and thus incorporate all limitations of claim 54.

(a) Rejection of claims 35 - 40 and 54 - 57 under 35 U.S.C. 102 over Zhang '779

First considering the rejections of claims 35 - 40 and 54 - 57 under 35 U.S.C 102 over Zhang '779, and upon review of claims 35 - 40 and 54 - 57 in view of Zhang '779, the Applicant has elected to amend claims 35 and 54 to more clearly and explicitly recite the distinctions between the present invention and Zhang '779 and to amend claims 36, 37, 40, 41 and 55 as necessary to comply with the amended claims 35 and 54, including canceling claim 37 and amending claim 41 in conformity with claim 35 although claim 41 was not included in the rejection under consideration. It will be noted that all of these amendments are fully supported by the specification and claims as originally filed and that these amendments do not add any new matter to or alter the subject matter or scope of the invention, the specification or the claims.

Therefore considering the present invention as recited in independent claims 35 and 54 as amended herein above, with particular reference to claim 35 as representative also of claim 54, claim 35 recites that the present invention is directed to a stereoscopic display system customized for a user's stereoscopic fusing capability. As recited therein, the stereoscopic display system includes an image source, a storage device for storing customization information describing an capability of the user to fuse stereoscopic images, a stereoscopic display device, and a processor for receiving images from the image source and the customization information from the storage device and processing the images to provide a rendered image to the stereoscopic display, including modifying the disparity of one or more pixels in the image according to the capability of the user to fuse stereoscopic images.

Next considering the teachings of Zhang '779, Zhang '779 describes a video conferencing system operating between physically separated conferees to transmitting views of each of the conferees to each of the other

conferees during a conference. The Zhang '779 system includes two or more image sources, that is, video cameras, at each conferee location, an image processor, a storage device and a display and obtains multiple views of each conferee from different viewing angles. The Zhang '779 system further captures head and eye angle information for each conferee and selects a camera viewing angle for each conferee so that each conferee appears to be in making eye contact with the other conferees.

It is therefore apparent that there are a number of fundamental distinctions between the present invention is recited in claims 35 and 54 and the teachings of Zhang '779.

For example, Zhang '779 does not in fact describe a stereoscopic display system and does not even mention stereoscopic images or a stereoscopic display, but instead describes only a system capable of providing and selecting among multiple non-stereoscopic single image views of a given scene, that is, of a given conferee. Zhang '779 accordingly does not and cannot address or consider any of the issues addressed and functions performed by the system of the present invention as recited in claims 35 and 54, such as the display of stereoscopic images, as opposed to the display of separate non-stereoscopic single images, the capabilities of a user's visual system to view stereoscopic images by fusing stereoscopic images, or the modification of stereoscopic images according to the visual capabilities of a user.

Considering these distinctions between the present invention as recited in claims 35 and 54 and the teachings of Zhang '779 in further detail, the present invention as recited in claims 35 and 54 acquires information pertaining to the capability of the user's visual system, that is, the capabilities of the user's eyes and mind, to see stereoscopic images by fusing corresponding pairs of stereoscopic image pairs, and uses that information to modify the stereoscopic images to fall within the capabilities of the user's stereoscopic vision characteristics.

In complete contrast from the present invention, the Zhang '779 system captures and employs only information pertaining to the positions of the conferee's heads and eyes, which is completely unrelated to the visual characteristics of a viewer's eyes and mind. The Zhang '779 system therefore does not and cannot consider or function with information pertaining to the

capabilities of the user's visual system and, in particular, the capabilities of the user's eyes and mind, to see stereoscopic images

In further complete distinction from the present invention, the Zhang '779 system uses the information identifying a conferee's eye and head positions only to select, from a plurality of possible single image views of a conferee, a view of the conferee that gives the impression that the conferee is making eye contact with a viewer of the selected image. The Zhang '779 system therefore does not even create or function with stereoscopic images or stereoscopic image pairs, and does not and cannot modify stereoscopic images to fall within a user's stereoscopic viewing capabilities.

It is therefore apparent that Zhang '779 does not teach or suggest a stereoscopic display system that includes a storage device for storing customization information describing a capability of the user to fuse stereoscopic images or a processor for rendering stereoscopic imagery to provide stereoscopic image pair information to a stereoscopic display, including manipulating the relative disparity in a stereoscopic image pair dependent upon a disparity map and the customization information.

It is therefore the Applicant's belief and position that for at least the above reasons the present invention as recited in claims 35 and 54 is completely and fundamentally and patentably distinguished over and from the teachings of Zhang '779 under the requirements and provisions of 35 U.S.C. 102 and 35 U.S.C. 103.

It is further the Applicant's belief and position that, because claims 36 - 40 and 55 - 57 are respectively dependent from claims 35 and 54 and thereby incorporate by dependency all recitations and limitations of claims 35 and 54, claims 36 - 40 and 55 - 57 are likewise and for the same reasons fundamentally and patentably distinguished over and from the teachings of Zhang '779 under the requirements and provisions of 35 U.S.C. 102 and 35 U.S.C. 103.

The Applicant therefore respectfully requests that the Examiner reconsider and withdraw all rejections of claims 35 - 40 and 54 - 57 under 35 U.S.C. 102 over Zhang '779, and the allowance of claims 35 - 40 and 54 - 57 as amended herein above.

(b) Rejection of claims 1 - 6, 9 - 11, 14, 16 - 20, 41 and 53 under 35 U.S.C. 103 over Zhang '779 in view of Dhond et al. and further in view of Nefian et al. '018

Next considering the rejection of claims 1 - 6, 9 - 11, 14, 16 - 20, 41 and 53 under 35 U.S.C. 103 over Zhang '779 in view of Dhond et al. and further in view of Nefian et al. '018, it will be noted that claims 2 - 6, 9 - 11, 14 and16 - 20 are directly or indirectly dependent from independent claim 1 and thereby incorporate all recitations and limitations of claim 1 by dependency therefrom. Claim 41, in turn, is dependent from independent claim 35, which has been discussed in detail herein above, and thereby incorporates all recitations and limitations of independent claim 35, while claim 53 is an independent claim that generally parallels the recitations of independent claim 1.

Claims 35 and 41

First considering the present invention as recited in independent claims 35 and 41, the recitations and limitations of claim 35 and the fundamental and patentable distinctions of claim 35 over Zhang '779 have been discussed in detail herein above and are incorporated into the present discussions by reference to avoid unnecessary repetition. It must also be noted that, because claim 41 is dependent from and incorporates all recitations and limitations of claim 35, claim 41 is likewise patentably distinguished over and from Zhang '779 under 35 U.S.C. 102 and 35 U.S.C. 103 for the same reasons that claim 35 is patentably distinguished over Zhang '779 under 35 U.S.C. 102 and 35 U.S.C. 103.

In brief, therefore, and presently considering only the recitations of claim 35, which are incorporated into claim 41 by dependency, the present invention is directed to a stereoscopic display system wherein the system receives stereoscopic images from an image source and customization information describing an capability of the user to fuse stereoscopic images and modifies the disparity of the stereoscopic images according to the capability of the user to fuse stereoscopic images to provide rendered stereoscopic images adapted to the viewer's stereoscopic viewing capabilities to a stereoscopic display.

As discussed above, Zhang '779 does not teach or suggest a stereoscopic display system that includes a storage device for storing customization information describing a capability of the user to fuse stereoscopic images or a processor for rendering stereoscopic imagery to provide stereoscopic

image pair information to a stereoscopic display, including manipulating the relative disparity in a stereoscopic image pair dependent upon a disparity map and the customization information.

As also discussed above, therefore, it is the Applicant's belief and position that claims 35, and thereby claim 41 by dependency from claim 35, are thereby completely, fundamentally and patentably distinguished over and from Zhang '779 under the requirements and provisions of 35 U.S.C. 102 and 35 U.S.C. 103 for at least the reasons discussed above.

Therefore next considering claim 41 and the teachings of Dhond et al. and Nefian et al. '018, it must be noted that the recitations of claim 35 that are